

A white outline map of Lake Huron is centered in the background of the slide. The text is overlaid on the map.

The State of Lake Sturgeon *(Acipenser fulvescens)* *In Lake Huron, 1995-1999*

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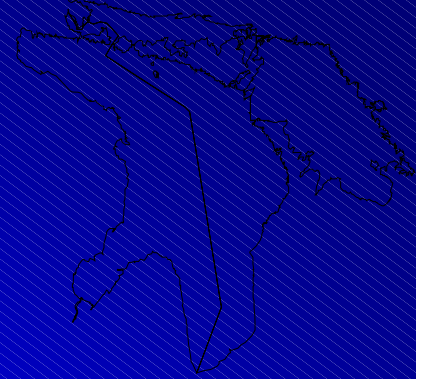
Fish Community Objectives

- *Increase abundance in U.S. waters*
- *Remove from threatened status in U.S. waters*
- *Maintain/rehabilitate populations in Cdn waters*



Lake Huron Committee:

- Original charge from LHC, 1994
 - *total catch and harvest*
 - *coordinate rehabilitation*
 - *identify populations / determine status*
 - *gain biological info*



Partnerships

- Development of Partners
 - *Central Great Lakes Bi-National Lake Sturgeon Working Group*
 - *USFWS-Alpena, LHMU/OMNR, MDNR-Mt. Clemens*
 - *Commercial Fishers (Ontario and Michigan), First Nations, Recreational Fishers (Michigan)*

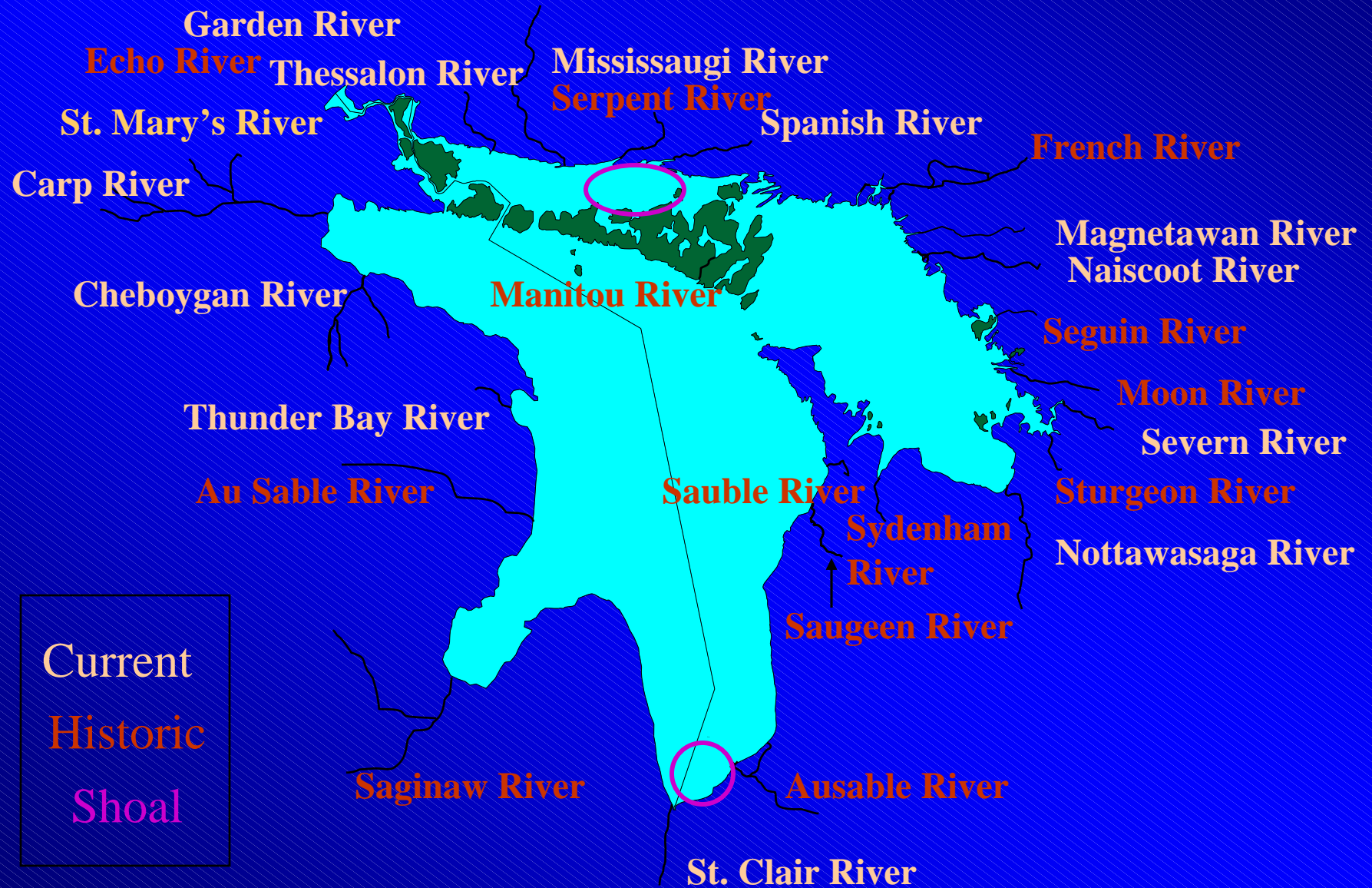


Current Programs:

- ✓ Biological data collection - all Basins, 1 Tributary, St. Clair River
- ✓ Movement Study - all Basins, 1 Tributary, St. Clair River
- ✓ Distribution Study - all Basins, St. Clair River
- ✓ Genetics Study contribution - all Basins, 1 Tributary, St. Clair River
- ✓ Spawning Population Studies - 1 Tributary



Preliminary Distribution:



Confirmed Spawning Distribution:

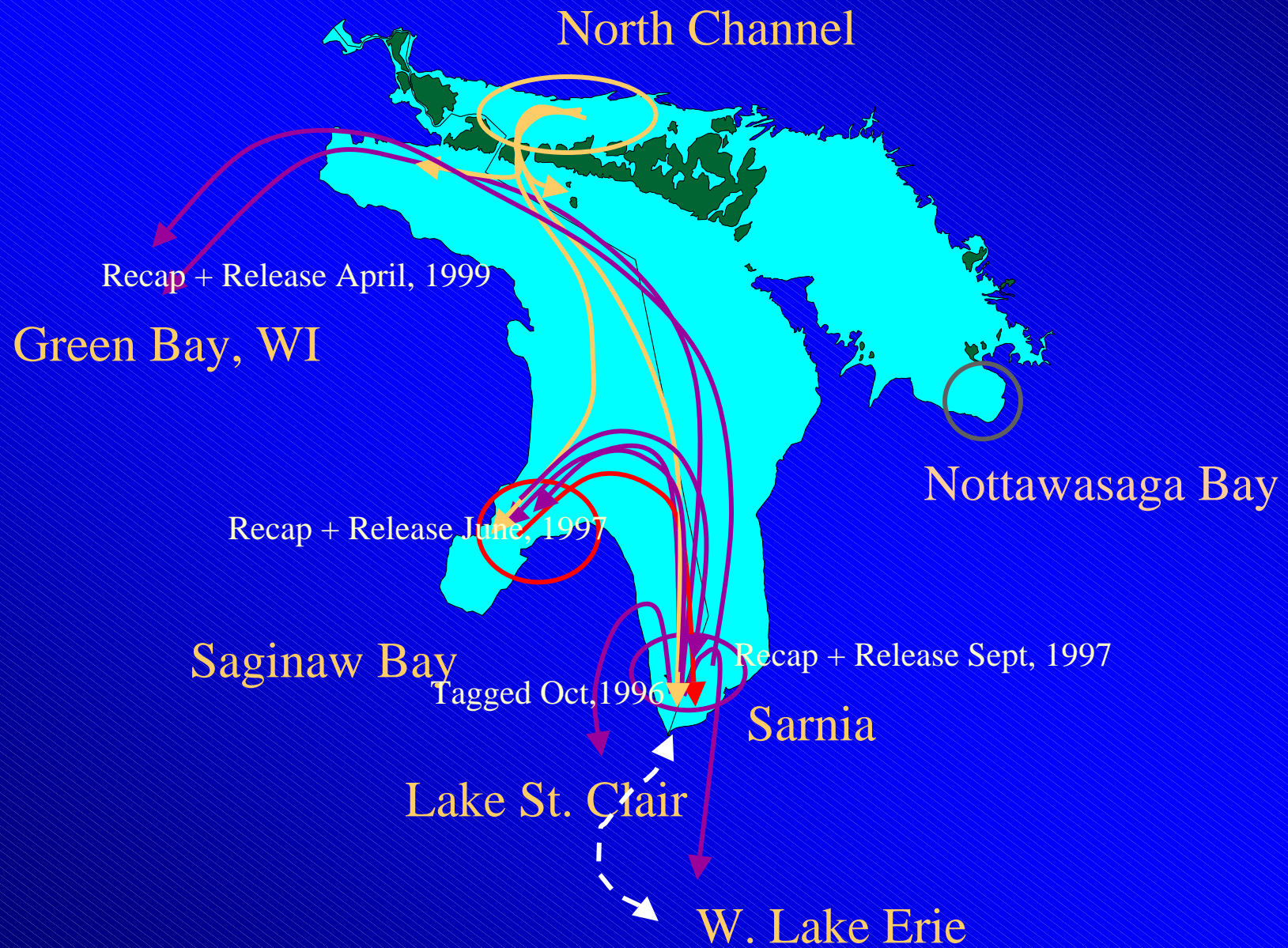


Movement Study:

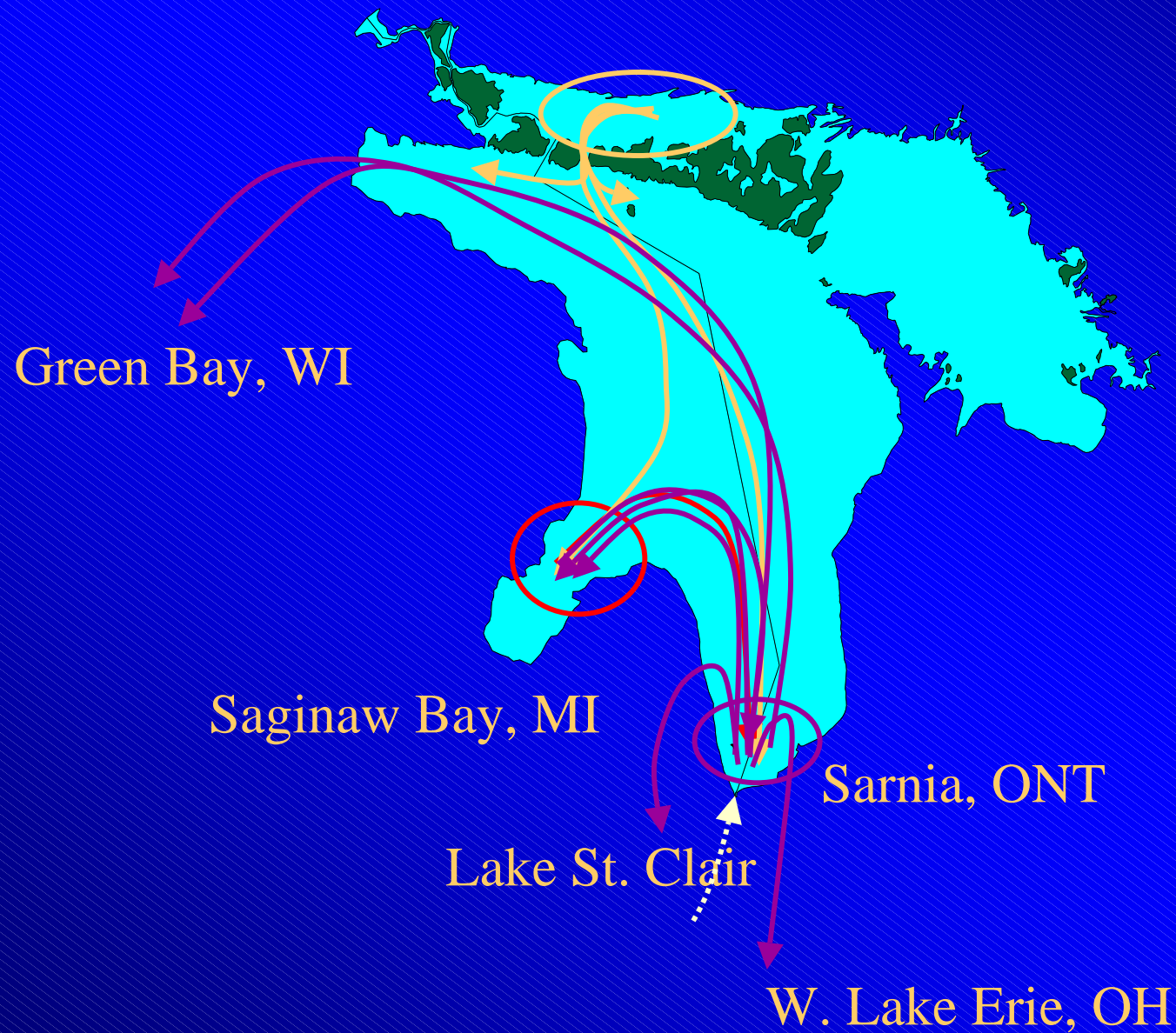
- Began 1995
- Tagging in North Channel, Saginaw Bay, S. Lake Huron, Georgian Bay, (outside the basin)
- 2,373 lake sturgeon observed
- 1,466 tagged
- 123 recaps

LH MU				Recap Year				
YEAR	# Observed	# Tagged	# Recaps	1995	1996	1997	1998	1999
1995	217	129	0	0	2	4	3	4
1996	183	120	2		0	3	4	1
1997	618	369	31			18	13	6
1998	589	358	36				9	9
1999	568	316	35					17
SubTotal	2175	1292	104	0	2	25	29	37
USFWS								
1995	25	15	0	0	1			
1996	36	25	1		0	4	3	
1997	53	50	4			0	1	1
1998	38	38	7				1	4
1999	46	46	7					1
SubTotal	198	174	19	0	1	4	5	6
TOTAL	2373	1466	123	0	3	29	34	43

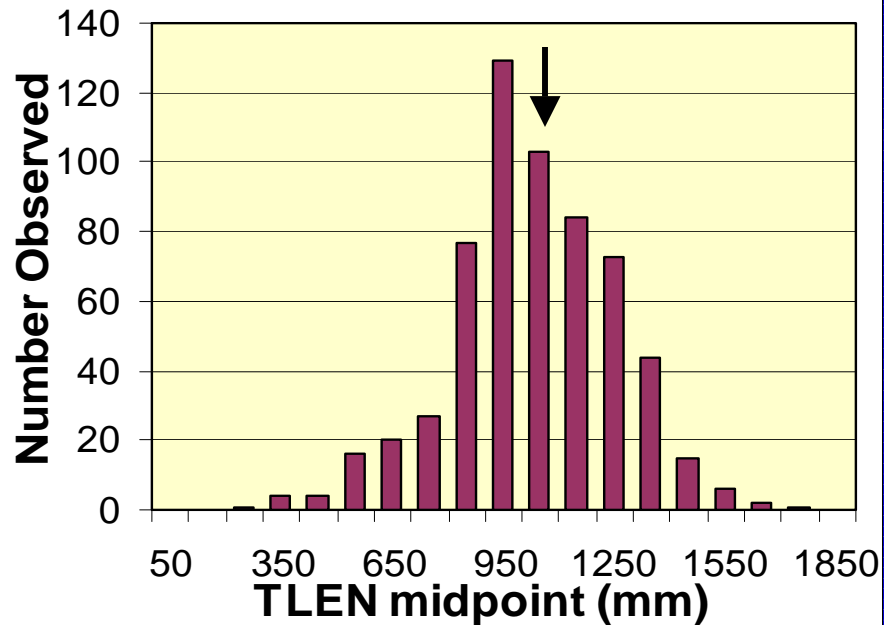
Movement:



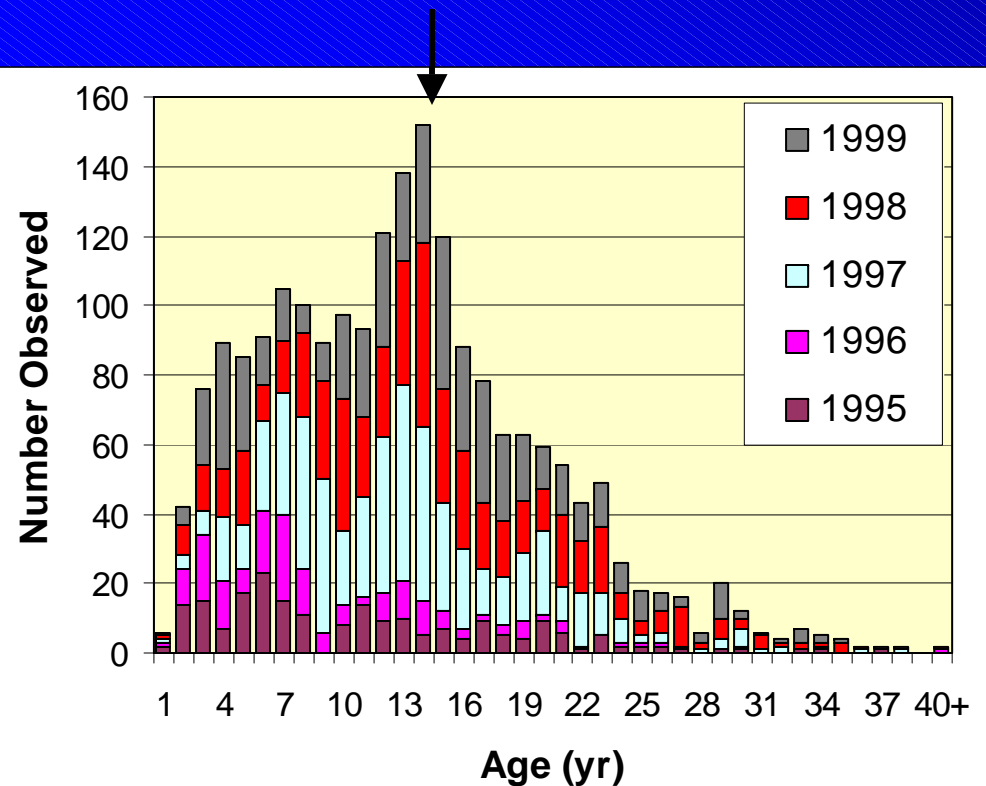
Movement:



Morphometric Characteristics:

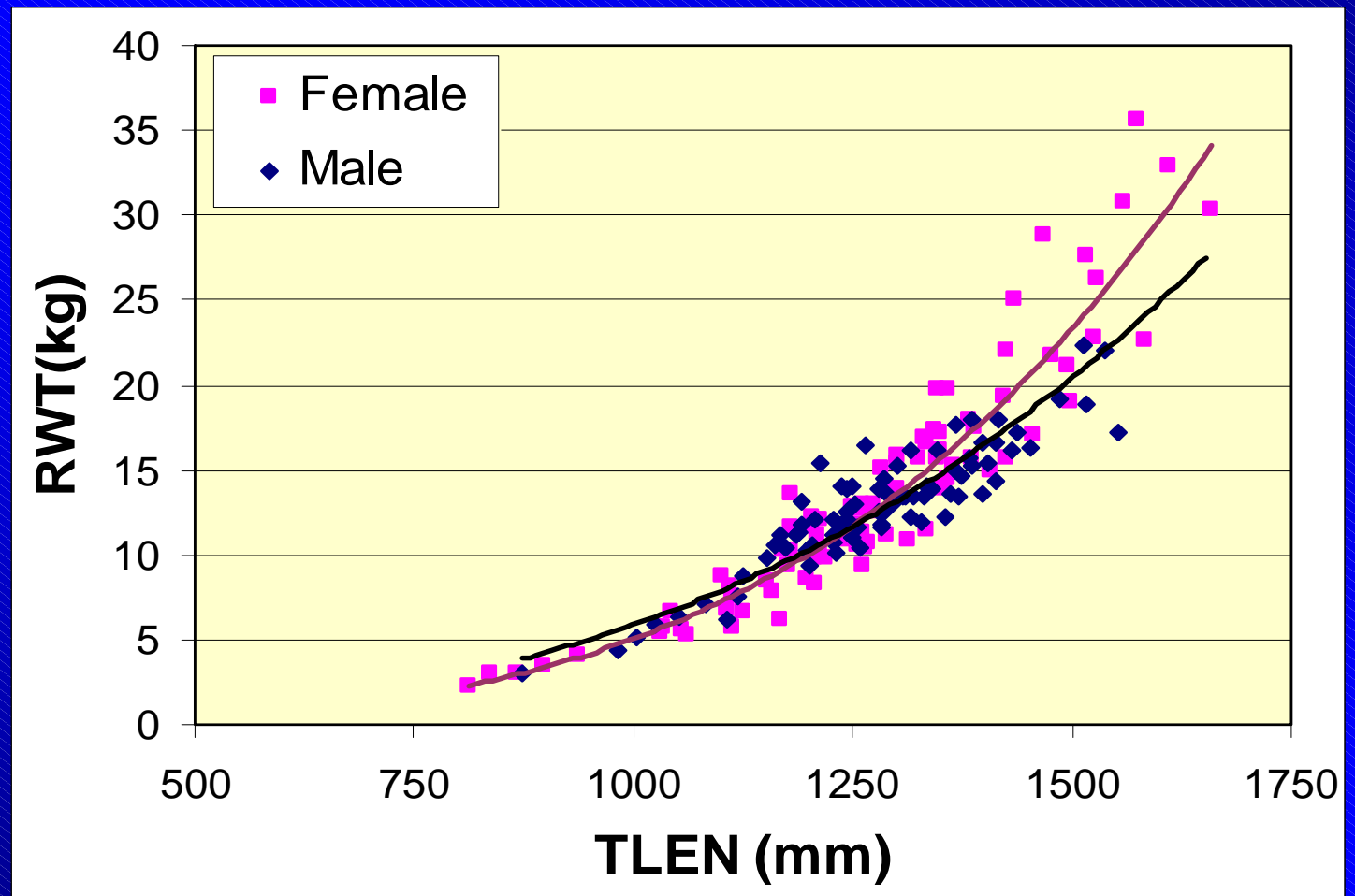


- Size and Age Distributions



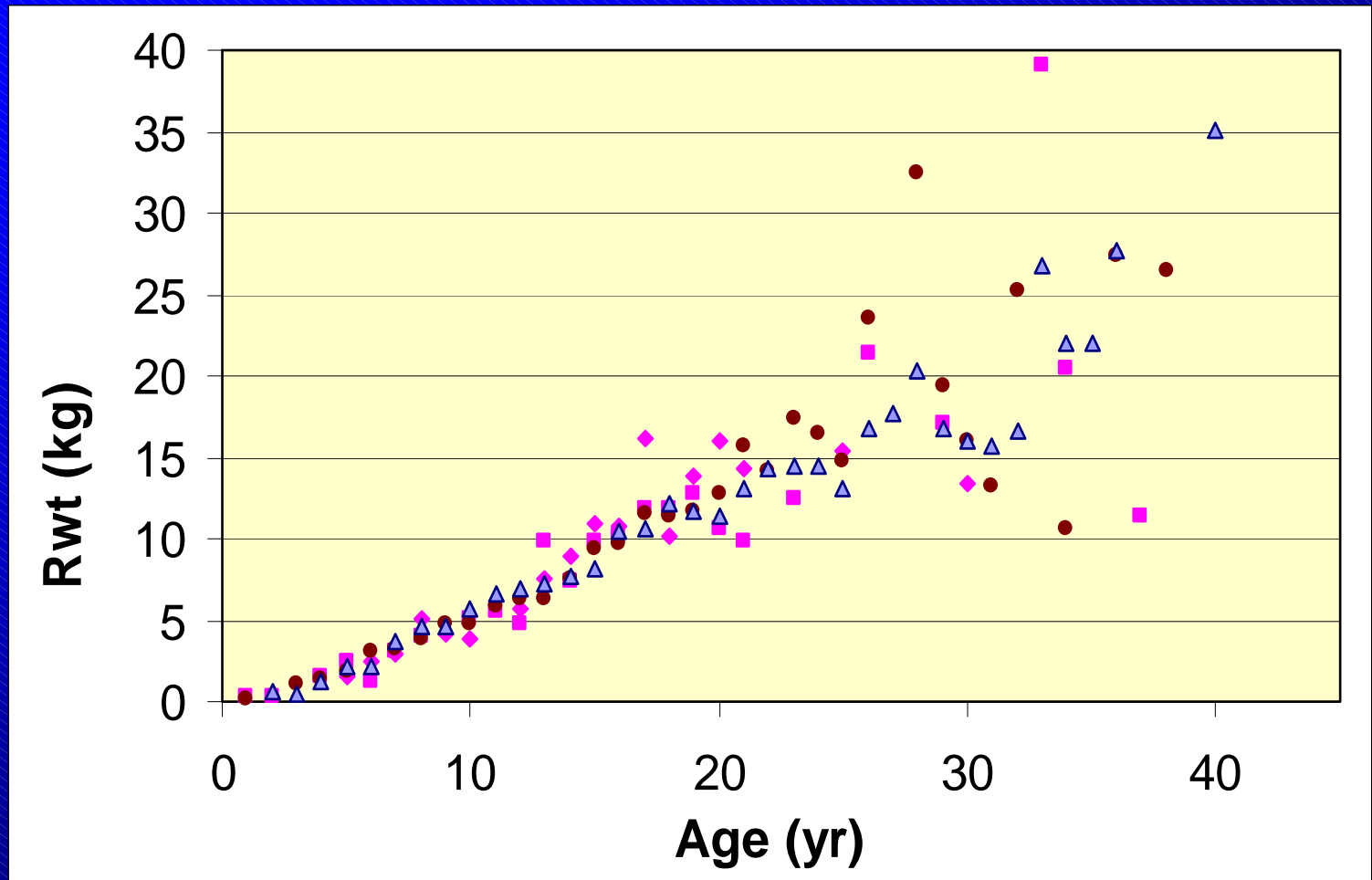
Morphometric Characteristics:

- Growth Parameters



Morphometric Characteristics:

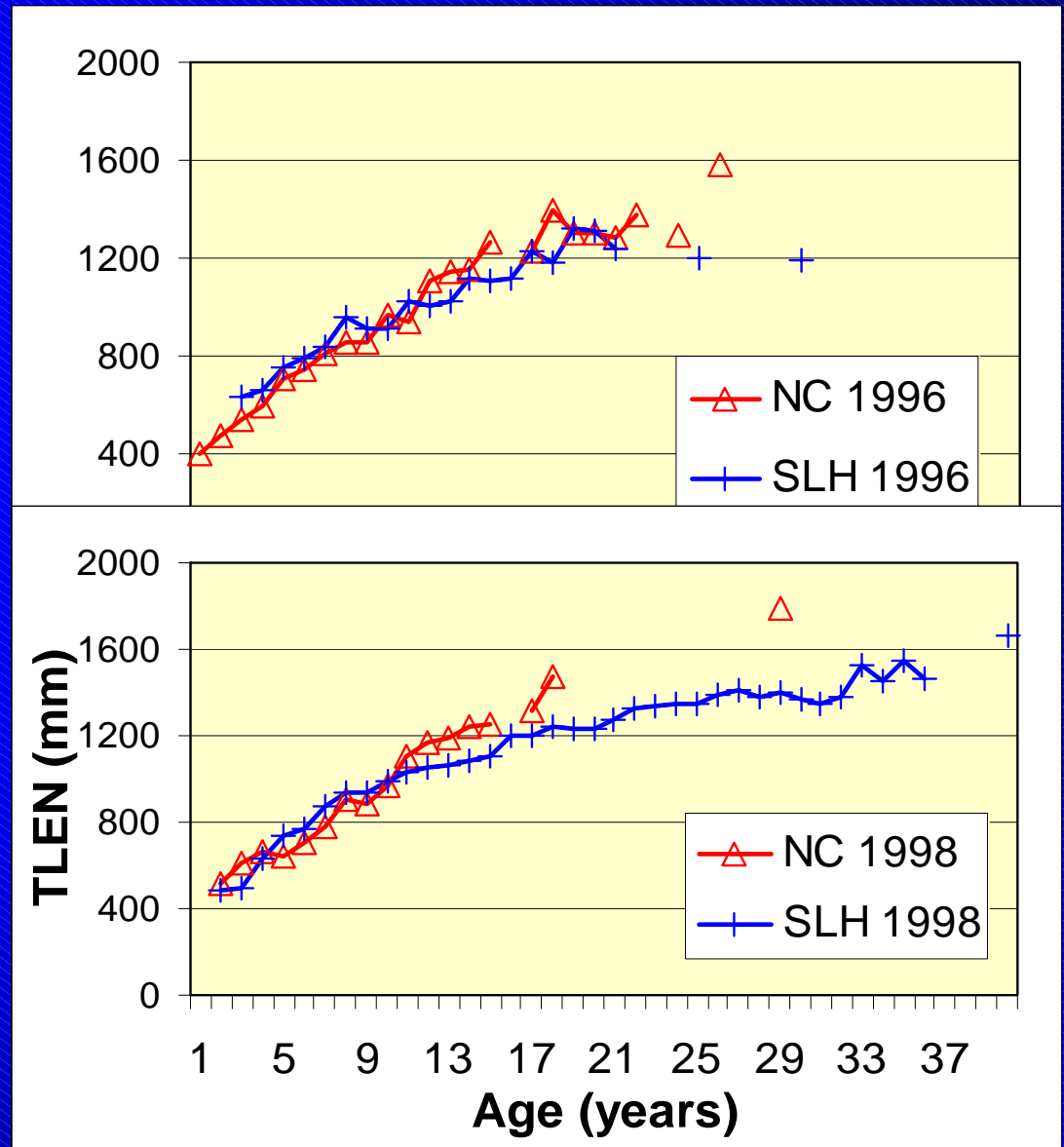
- Growth Parameters



Morphometric Characteristics:

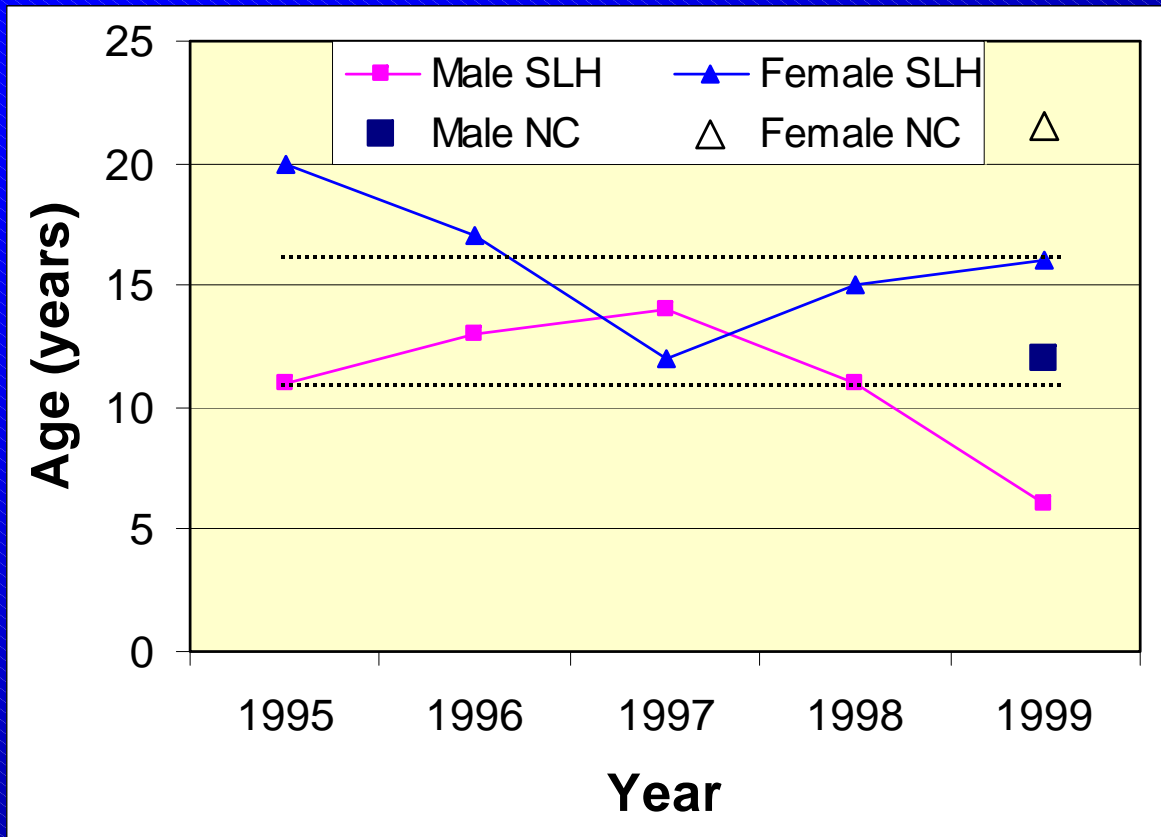
- Growth Parameters

Differential Growth
by Location



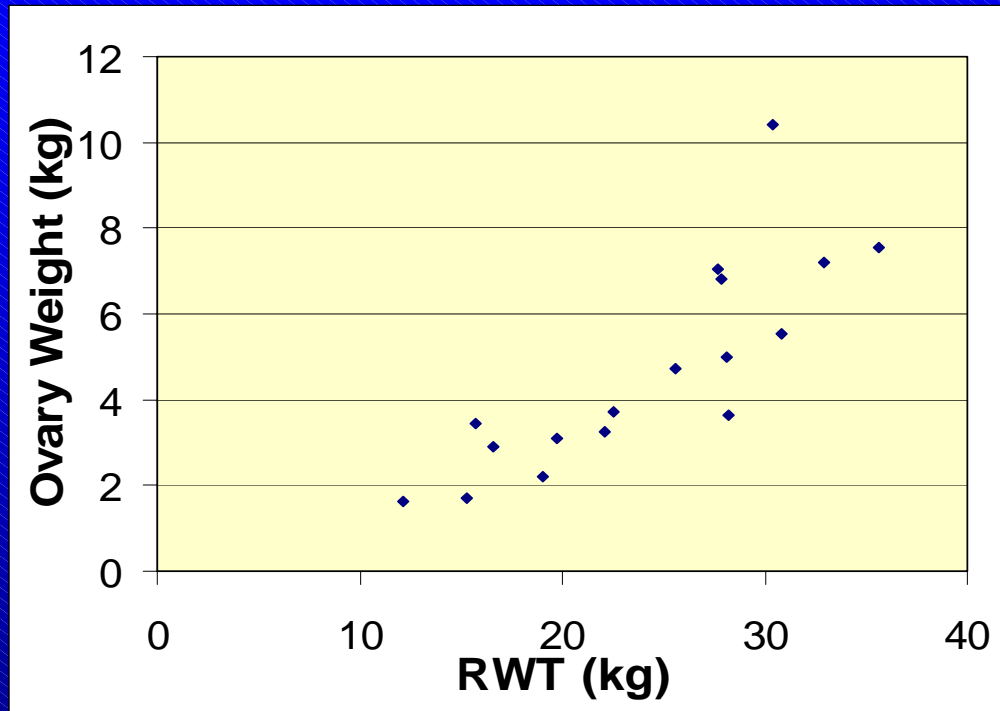
Morphometric Characteristics:

- Maturation
- Average ages mature fish
 - NC male = 15.0 yr
 - SLH male = 18.3 yr
 - NC female = 19.7
 - SLH female = 21.4
- Minimum age 1st maturity SLH



Morphometric Characteristics:

- Maturation



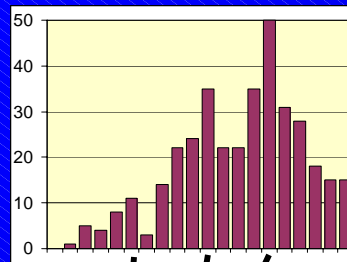
Average 4.68 kg

Percent of RWT = 18.78%

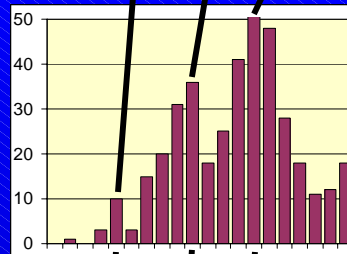


Life History: year class strength

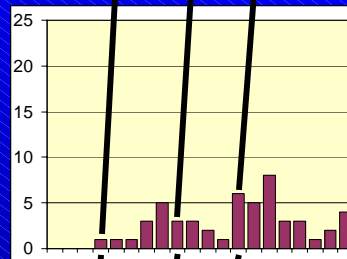
1998



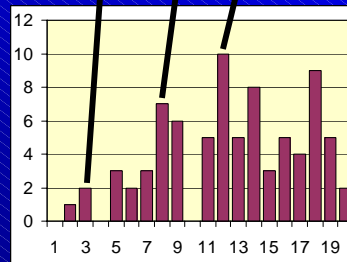
1997



1996



1995

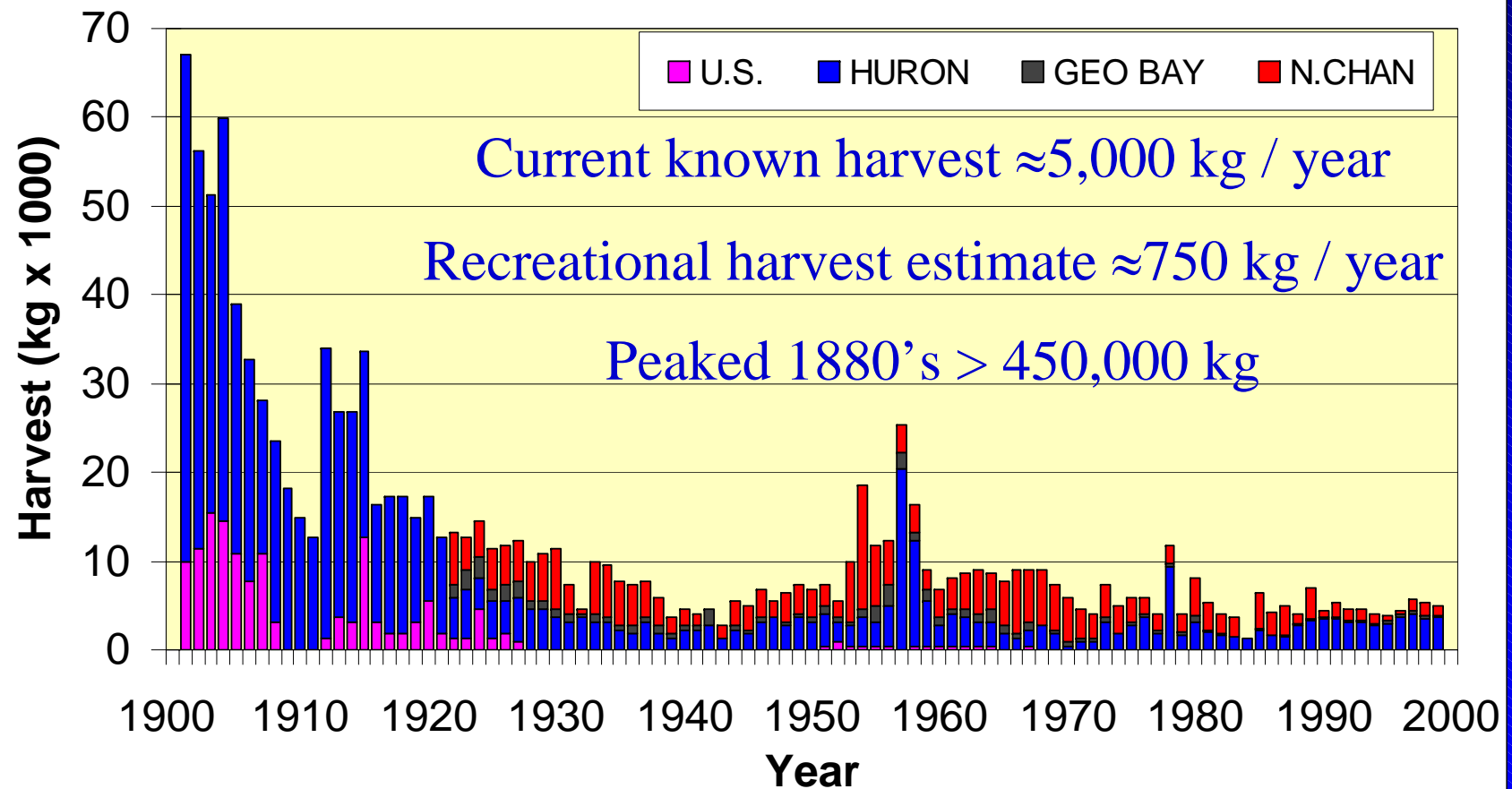


S. Lake Huron

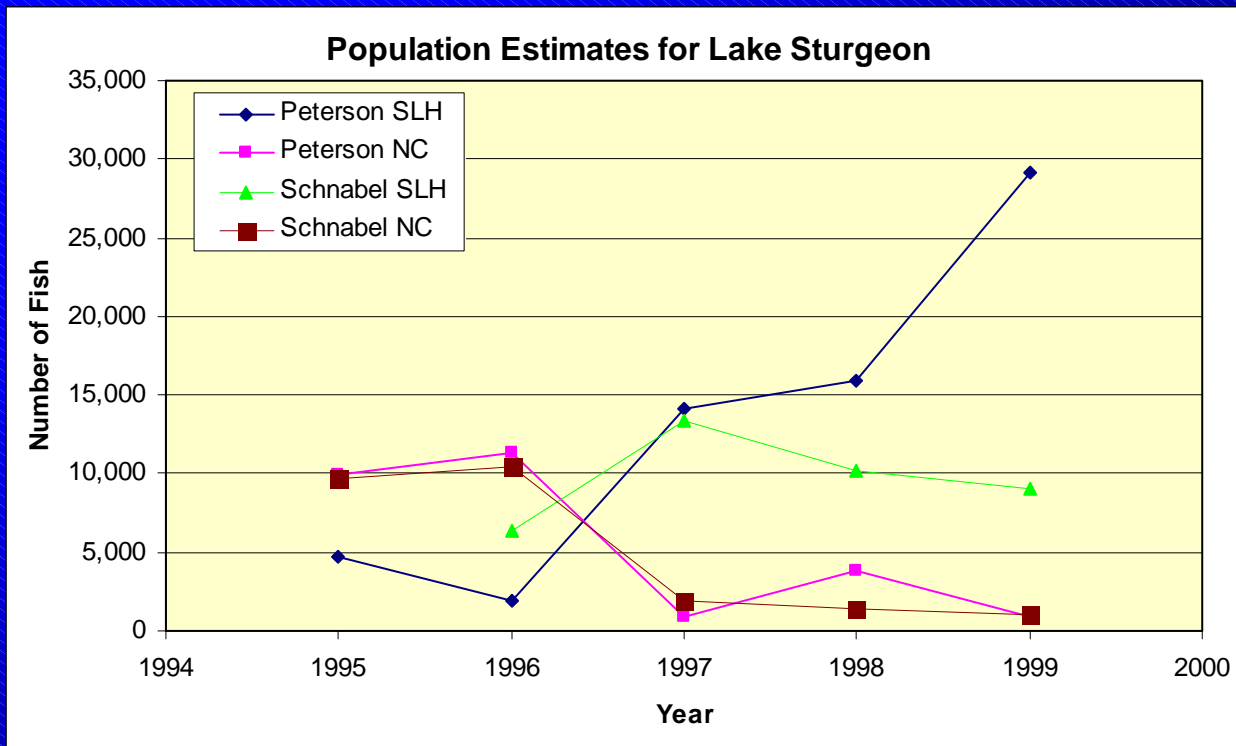
1992..1987..**1983**..1977



Harvest



Population Estimates



	SLH	NC	GB
Average Pop'n Estimate 95-99	14,595	5,107	10,000
Estimated Harvest (#) 1999	291	84	18
Est. Exploitation Rate (%)	1.994	1.645	0.180

Current Management

- Recreational

- Michigan

- Lake Huron - catch and release only
 - Season closed March 31 to July 16
 - St. Clair system - 1 per year, 42-50"
 - Season closed Sept 30 to July 16

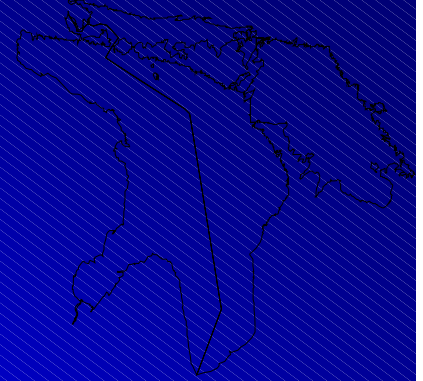
- Ontario

- Lake Huron - one fish per day
 - Open all year
 - Watershed rivers - one fish per day
 - Season closed May 14 to June 15
 - St. Clair system - one fish per day
 - Open all year



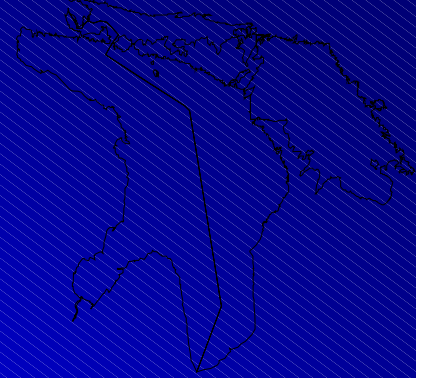
Current Management

- Commercial
 - Michigan
 - No quota/harvest allowed
 - Ontario
 - Quota
 - 4,958 kg in Main Basin
 - 1,408 kg in Georgian Bay
 - 5,135 kg in North Channel
 - Open year round
 - Minimum Size Dressed Length 63.5cm (25")
 - (equivalent to 108cm (42.5") Total Length)



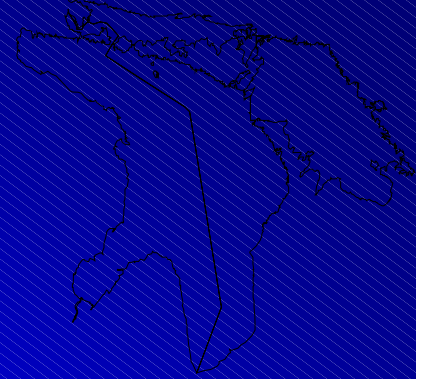
Evolving Issues:

- *Diverse Management Actions*
- *Stock Dynamics partially understood*
- *Spawning Stocks not identified*
- *Sea Lamprey Control “Lake Sturgeon Protocol”*
- *Habitat Access / Improvement*



Action Required:

- *Identify lake sturgeon rivers, stocks*
- *Address Sea Lamprey Treatment Requirements*
- *Review commercial and recreational regulations*
- *Determine habitat requirements (all life stages)*
- *Research non-Traditional fish passage*
- *Develop lakewide management plan*
- *Continue Interagency Coordination/Collaboration*



The Future is in

